Attachment H

MODEL DMSA CHARACTERIZATION REPORT

[THE REPORT WILL BEGIN WITH A GENERAL SYNOPSIS OF THE TYPE AND QUANTITY OF ITEMS ENCOUNTERED IN THE DMSA, THE DATE OF INITIATION OF CHARACTERIZATION ACTIVITIES, AND THE CONCLUSION OF CHARACTERIZATION ACTIVITIES.]

Department of Energy Material Storage Area (DMSA) C-310-02 is located on the east wall of the C-310 process building near columns E12/14-F12/14. It encompasses approximately 600 square feet (ft^2). This DMSA is also identified as Solid Waste Management Unit (SWMU) #231. Within the DMSA is a metal fenced area (cage) used for storage of excess laboratory equipment and supplies. The area surrounding the fenced cage was used for storage of electrical supplies, miscellaneous scrap metal and wooden items. Two metal B-25 storage containers are also located in the DMSA. Numerous Resource Conservation Recovery Act (RCRA) hazardous wastes such as circuit boards, fuses, light bulbs, aerosol cans, vacuum tubes and pump oils were identified in the DMSA. When identified, the hazardous wastes are classified as either "newly generated" or "newly discovered". This classification is explained in greater detail in the RCRA section of the Characterization Report. Recycling and offsite disposal of the circuit boards are also found in the RCRA section. The waste and materials in the DMSA occupied a volume of approximately 1,112 cubic feet (ft^3) with an estimated weight of 16,377 pounds (lbs). Field activities in the DMSA were initiated in August 2002. Completion of field activities occurred in May 2003.

RCRA/RCRA MIXED

[REPORT WILL INCLUDE INFORMATION EITHER IDENTIFYING RCRA/RCRA MIXED WASTE DISCOVERED OR GENERATED OR INDICATING THAT NO RCRA/RCRA MIXED WASTE WAS DISCOVERED OR GENERATED.]

Resource Conservation Recovery Act (RCRA) hazardous wastes are identified as either "newly discovered" or "newly generated". Newly discovered wastes are those hazardous wastes which are found loose or not installed in equipment. Examples of this waste type are aerosol cans or light bulbs lying on the floor. Newly generated wastes are hazardous wastes which must be removed from equipment (such as circuit boards) or drained from equipment (such as oils). These classifications are noted on the "Waste Removed from DMSA C-310-02" section of this report. Numerous circuit boards, two aerosol cans, six lithium batteries, several light bulbs, vacuum tubes and fuses were identified in the DMSA. Also small volumes of oils were drained from three pumps. As items/materials were characterized and classified as hazardous, they were packaged, labeled and transported to a RCRA permitted storage facility. The exceptions to this were the three containers of oils which were placed in a Satellite Accumulation Area (SAA) which was established within the DMSA on November 19, 2002. The aerosol cans were stored in the C-733 RCRA permitted storage facility which is designated for storage of ignitable wastes. The remaining hazardous wastes were stored in the C-752-A RCRA permitted facility. The lithium batteries were segregated from other wastes since they are reactive

hazardous wastes. In May 2003, it was determined that the contents of two of the three containers of waste oils were consumed in the sampling and analytical process. The containers were then verified as "RCRA empty" and placed in a low level waste (LLW) collection container. The third bottle of oil contained a small amount of oil. This waste was transported from the SAA to the C-752-A RCRA permitted facility. Documentation relative to these wastes was amended to reflect the change in status. The SAA was closed on May 12, 2002. The aerosol cans were classified as newly discovered hazardous waste. The remaining hazardous wastes were removed from equipment and classified as newly generated. In December 2002, the Department of Energy (DOE) provided guidance for the recycling of circuit boards which are not radiologically contaminated.[1] These circuit boards are not considered hazardous waste since they meet the scrap metal being recycled exclusion in 40 CFR Part 261.4 (a)(13). Large quantities of the circuit boards from C-310-02 met this criterion and were reclassified as nonhazardous and shipped offsite on February 18, 2003, to Advanced Environmental Recycling Company (AERC) in Allentown, Pennsylvania. The circuit boards which were recycled are indicated under the column "recy" on the DMSA C-310-02 Inventory Report as well as the Inventory and Characterization Report in the attached compact disk. The hazardous wastes in the DMSA which were radiologically contaminated were classified as RCRA/Mixed wastes. The circuit boards and vacuum tubes which were classified as RCRA/Mixed were shipped for disposal to Envirocare of Utah, Incorporated which is located in Clive, Utah, on May 2, 2003. This is noted on the Initial Inventory and Characterization Report and also on the Waste Identified for Removal Report in the attached compact disk.

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[1] Seaborg, W. Don December 31, 2002, Site Manager, Department of Energy, Paducah Site Office, letter to Robert H. Daniell, Division of Waste Management, Kentucky Department for Environmental Protection, Frankfort, Kentucky